



Faculty of Odonto-Stomatology  
University of Medicine and  
Pharmacy Ho Chi Minh City



South East Asia Association  
For Dental Education



The 27<sup>th</sup> Annual Scientific Meeting  
**South East Asia Association For Dental Education**

# Dental Education In Asia

“One Community, One Vision”

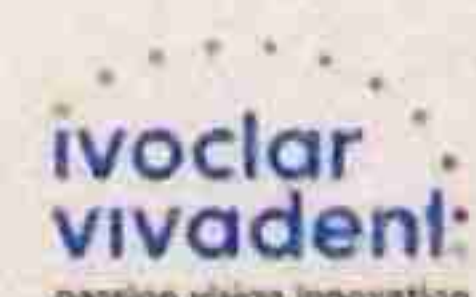
September 8<sup>th</sup> - 9<sup>th</sup>, 2016  
Ho Chi Minh City, Viet Nam



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## D\_05

### Bioceramic Nanofiber Electrospinning for Dental Application

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**Keywords:** Electrospinning, Nanofibers, Bioceramic

#### Abstract

Electrospinning has been widely investigated as a simple and useful method for drawing fibers from polymer solutions. Electrospinning is able to produce continuous fibers from the submicron to nanometer size. Nanofibers with a huge surface area to volume ratio have the potential to significantly improve current technology and find application in new areas. In the past several decades, this technique has been extended to fabricate nanofibers made of ceramics and composite materials. With this expansion, the applications for electrospinning fibers are vastly expanded. Most studies of ceramic electrospinning to date have reported fabrication, and sometimes property evaluation. The objective of this review covers the active research area of producing bioceramic nanofibers with various compositions and properties by means of the electrospinning process in dentistry. In addition, extensive research bioceramic nanofiber for dental applications have been conducted.

## D\_06

### The frequency of karyorrhexis on woman bucal epithelial cell of mucosa induced by chewing bitel

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**Keywords:** chewing betel, karyorrhexis, epithelial cell

#### Abstract

Chewing betel is recognized as part of South East Asian countries culture including Indonesia. Materials for chewing betel like betel leaf, areca nut, slake lime, uncaria gambier and tobacco can cause cell death on buccal mucosa. One indication of cell death is marked by karyorrhexis. The purpose of this study was to recognize the frequency of karyorrhexis on epithelial cell of buccal mucosa induced by chewing betel among Yogyakarta women. The subject of this study consisted of ten women with at least five years betel chewing habit and living in Yogyakarta,. The subjects of control group were ten women that were not chewers. Epithelial cells of buccal mucosa were swapped using cytobrush, then later processed for histological staining using Feulgen-Rossenbeck technique. Identification and cell counting of karyorrhexis were done using light microscope with 400x magnification. The frequency of karyorrhexis was calculated out of 1000 cells and analyzed using independent sample T-test ( $p < 0.05$ ). The results of this study showed significance difference between betel chewing group compared to control group. It was concluded that chewing betel could increase the frequency of karyorrhexis in epithelial cells of buccal mucosa on Yogyakarta women.